## DEPARTMENT OF HEALTH AND HUMAN SERVICES

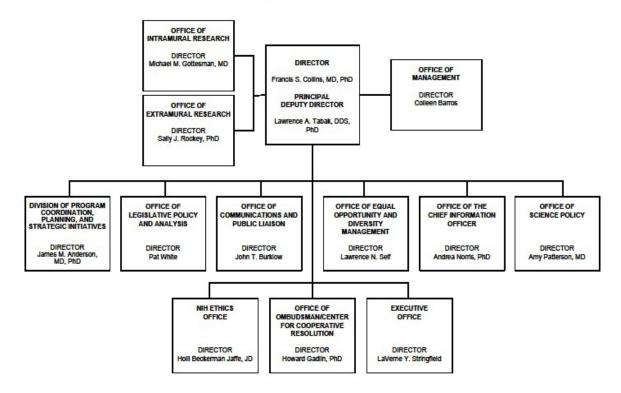
## NATIONAL INSTITUTES OF HEALTH

## Office of the Director (OD)

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#### NATIONAL INSTITUTES OF HEALTH

#### Office of the Director Organization Structure



#### NATIONAL INSTITUTES OF HEALTH

#### Office of the Director

For carrying out the responsibilities of the Office of the Director, NIH, [\$1,461,880,000] \$1,429,161,000, of which up to \$25,000,000 shall be used to carry out section 213 of this Act: *Provided*, That funding shall be available for the purchase of not to exceed 29 passenger motor vehicles for replacement only: *Provided further*, That the NIH is authorized to collect third party payments for the cost of clinical services that are incurred in NIH research facilities and that such payments shall be credited to the NIH Management Fund: Provided further, That all funds credited to NIH Management Fund shall remain available for one fiscal year after the fiscal year in which they are deposited: [Provided further, That up to \$193,880,000 shall be available for continuation of the National Children's Study]: *Provided further*, That [\$545,962,000] \$544,930,000 shall be available for the Common Fund established under section 402A(c)(1) of the PHS Act: *Provided further*, That of the funds provided \$10,000 shall be for official reception and representation expenses when specifically approved by the Director of the NIH: Provided further, That the Office of AIDS Research within the Office of the Director of the NIH may spend up to \$8,000,000 to make grants for construction or renovation of facilities as provided for in section 2354(a)(5)(B) of the PHS Act: Provided further, That the Director may direct up to 1 percent of the total made available in this or any other Act to all National Institutes of Health appropriations to activities that the Director may so designate: Provided further, That no such appropriation shall be decreased by more than 1 percent by any such transfers and that the Congress is promptly notified of the transfer. (Department of Health and Human Services Appropriations Act, 2012.)

# NATIONAL INSTITUTES OF HEALTH Office of the Director

## Amounts Available for Obligation $^1$

(Dollars in Thousands)

Source of Funding	FY 2011 Actual	FY 2012 Enacted	FY 2013 PB
Appropriation	\$ 1,177,300	\$ 1,461,880	\$ 1,429,161
Type 1 Diabetes	0	0	0
Rescission	(10,337)	(2,763)	0
Supplemental	0	0	0
Subtotal, adjusted appropriation	\$ 1,166,963	\$ 1,459,117	\$ 1,429,161
Real transfer under Secretary's transfer authority	0	(416)	0
Comparative Transfers for NCATS reorganization	288,361	0	0
Comparative Transfers to NCATS for Therapeutics and Rare and Neglected Diseases (TRND)	0	0	0
Comparative Transfers to NLM for NCBI and Public Access	(1,001)	(1,320)	0
Subtotal, adjusted budget authority	\$ 1,454,323	\$ 1,457,381	\$ 1,429,161
Unobligated balance, start of year	0	0	0
Unobligated balance, end of year	0	0	0
Subtotal, adjusted budget authority	\$ 1,454,323	\$ 1,457,381	\$ 1,429,161
Unobligated balance lapsing	(59)	0	0
Total obligations	\$ 1,454,264	\$ 1,457,381	\$ 1,429,161

<sup>&</sup>lt;sup>1</sup> Excludes the following amounts for reimbursable activities carried out by this account:

FY 2011 - \$738,214 FY 2012 - \$740,000 FY 2013 - \$945,889

#### NATIONAL INSTITUTES OF HEALTH

#### Office of the Director

Budget Mechanism - Total (Dollars in Thousands)

	F	Y 2011	F	Y 2012	FY 2013		(	Change
MECHANISM		Actual		Enacted	PB			
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
Research Grants:								
Research Projects:		\$ 414,158		\$ 414,444		\$ 413,198		\$ (1,246
Research Centers		300,588		300,495		299,591		(904)
Other Research		185,223		185,627		185,069		(558)
Total, Research Grants		\$ 899,969		\$ 900,566		\$ 897,858		\$ (2,708)
Training		18,594		18,379		18,323		(56)
R& D Contracts		228,914		230,964		200,759		(30,205)
Intramural Research		40,217		39,540		39,540		0
Res. Mgmt. and Support		266,629		267,932		272,681		4,749
Cancer Control		0		0		0		(
Construction		0		0		0		(
Total Other Than Research Grants		\$ 554,354		\$ 556,815		\$ 531,303		\$ (25,512)
Total, OD		\$1,454,323		\$1,457,381		\$1,429,161		\$ (28,220)

#### NATIONAL INSTITUTES OF HEALTH

#### Office of the Director

#### Budget Mechanism - OD PPA

	FY 2011 FY 2012 Actual Enacted		FY 2013 PB			
OD Operations	\$	122,837,000	\$	123,203,000	\$	123,081,000
NIH Director's Challenge Fund <sup>1</sup>	Ψ.	1,500,000	Ψ	1,500,000	Ψ	1,500,000
Division of Program Coordination, Planning and Strategic Initiatives		8,116,000		8,116,000		8,116,000
Office of Behavioral & Social Sciences Research		27,001,000		27,001,000		27,001,000
Office of AIDS Research		63,302,000		63,802,000		63,802,000
Office of Research on Women's Health		42,324,000		42,324,000		42,324,000
Office of Disease Prevention		6,065,000		6,065,000		6,065,000
Office of Dietary Supplements		27,717,000		27,717,000		27,717,000
Office of Research Infrastructure Programs		286,409,000		283,698,000		283,698,000
Science Education Parternship Awards		19,465,000		20,282,000		20,282,000
Office of Science Education		3,980,000		3,980,000		3,980,000
Director's Discretionary Fund		9,854,000		9,981,000		9,981,000
Foundation for the National Institutes of Health		493,000		493,000		493,000
Intramural Loan Repayment and Scholarship		7,393,000		7,393,000		7,393,000
Nuclear/Radiological/Chemical Countermeasures		95,298,000		95,298,000		95,298,000
National Children's Study		191,048,000		193,098,000		165,000,000
Common Fund		543,021,000		544,930,000		544,930,000
Total	\$	1,454,323,000	\$	1,457,381,000	\$	1,429,161,000

 $<sup>1/\,</sup>Items\ in\ italics\ are\ "non-adds";\ for\ reference\ only\ (NIH\ Director's\ Challenge\ Fund\ amounts\ are\ already\ included\ in\ OD\ Operations\ budget.$ 

#### Major Changes in the Fiscal Year 2013 President's Budget Request

Major changes by budget mechanism and/or budget activity detail are briefly described below. Note that there may be overlap between budget mechanism and activity detail and these highlights will not sum to the total change for the FY 2013 budget request for OD, which is -\$28.220 million below the FY 2012 level, for a total of \$1,429.161 million.

National Children's Study (-\$28.098 million; total \$165.000 million): The FY 2013 Budget request for NCS will support the continuation of the Vanguard Study and the beginning of the Main Study. NIH is evaluating alternative sampling approaches that will reduce costs by building on existing infrastructure, and streamlining administrative components.

#### NATIONAL INSTITUTES OF HEALTH

#### Office of the Director Summary of Changes

(Dollars in Thousands)

FY 2012 Enacted				\$1,457,381
FY 2013 Estimate				1,429,161
Net change				(\$28,220)
	2	2013		
	Est	timate	Change fr	om FY 2012
		Budget		Budge
CHANGES	FTEs	Authority	FTEs	Authority
A. Built-in:				
1. Intramural Research:				
a. Annualization of January				
2012 pay increase & benefits		\$5,060		\$0
b. January FY 2013 pay increase & benefits		5,060		1
c. One more day of pay		5,060		19
d. Annualization of PY net hires		5,060		0
e. Payment for centrally furnished services		0		0
f. Increased cost of laboratory supplies, materials,				
other expenses, and non-recurring costs		34,480		0
Subtotal				\$20
2. Research Management and Support:				
a. Annualization of January				
2012 pay increase & benefits		\$94,737		\$4
b. January FY 2013 pay increase & benefits		94,737		288
c. One more day of pay		94,737		356
d. Annualization of PY net hires		94,737		0
e. Payment for centrally furnished services		2,772		0
f. Increased cost of laboratory supplies, materials,				
other expenses, and non-recurring costs		175,172		(668)
Subtotal	1			(\$20)
Subtotal, Built-in				(\$0)

# NATIONAL INSTITUTES OF HEALTH Office of the Director

## Summary of Changes--continued

		2013		
	]	Estimate	Change	from FY 2012
CHANGES	No.	Amount	No.	Amount
B. Program:				
1. Research Project Grants:				
a. Noncompeting	0	\$242,328	0	(\$793)
b. Competing	0	166,250	0	(544)
c. SBIR/STTR	0	0	0	0
Total	0	\$413,198	0	(\$1,246)
2. Research Centers	0	\$299,591	0	(\$904)
3. Other Research	0	185,069	0	(558)
4. Research Training	0	18,323	0	(56)
5. Research and development contracts	0	200,759	0	(30,205)
Subtotal, Extramural		\$1,116,940		(\$32,969)
	<u>FTEs</u>		<u>FTEs</u>	
6. Intramural Research	0	\$39,540	0	\$0
7. Research Management and Support	690	272,681	(7)	4,749
8. Construction		0		0
9. Buildings and Facilities		0		0
Subtotal, program	690	\$1,429,161	(7)	(\$28,220)
Total changes				(\$28,220)

#### NATIO.KAL I.KSTITUTES OF HEALTH

#### Office of the Director Budget Authority by Acth-ity (Dollars in thousands)

	F	Y 2011	FY 2012		F	Y 2013	Change vs.	
	1	Actual	E	inacted		PB FY 2012 I		Enacted
Extramural Research	FfEs	Amount	FfEs	Amount	FfEs Amouot		FfEs	Amouot
Detail:								
								0
								0
								0
								0
Subtotal, Extramural		\$0		\$0		\$0		SO
Intramural Research	0	SO	0	\$0	0	SO	0	SO
Research Management & Support	697	\$1,454,323	697	S1,457,381	690	S1,429,161	(7)	(\$28,220)
TOTAL	697	51,454,323	697	S1,457,381	690	S1,429,161	(7)	(\$28,220)

<sup>1.</sup> Includes Real Transfers and Comparable Adjustments as detailed in the \* Amouots Available for Obligation\* table.

## NATIONAL INSTITUTES OF HEALTH Office of the Director

#### **Authorizing Legislation**

	PHS Act/ Other Citation	U.S. Code Citation	2012 Amount Authorized	FY 2012 Enacted	2013 Amount Authorized	FY 2013 PB
Research and Investigation	Section 301	42§241	Indefinite	\$1,457,381,000	Indefinite	- \$1,429,161,000
Office of the Director	Section 401(a)	42§281	Indefinite	<b>41, 107,001,000</b>	Indefinite	ψ1, 1 <u>2</u> 3,101,000
Total, Budget Authority				\$1,457,381,000		\$1,429,161,000

# NATIONAL INSTITUTES OF HEALTH Office of the Director

## **Appropriations History**

Fiscal	Budget Estimate to		~	
Year	Congress	House Allowance	Senate Allowance	Appropriation
2004	\$317,983,000	\$317,568,000	\$323,068,000	\$329,707,000
Rescission				(\$2,203,000)
2005	<b>427</b> 0 64 <b>7</b> 000	<b>427</b> 0 <b>547</b> 000	<b>#254 400 000</b>	4.4.4.4.000
2005	\$359,645,000	\$359,645,000	\$364,100,000	\$361,145,000
Rescission				(\$3,099,000)
2006	\$385,195,000	\$532,216,000	\$537,434,000	\$532,395,000
Rescission				(\$4,829,000)
				(4 1,023,000)
2007	\$667,825,000	\$667,825,000	\$687,825,000	\$478,650,000
Rescission				\$0
2008	\$517,062,000	\$1,114,422,000	\$1,145,790,000	\$1,109,099,000
Rescission				(\$19,720,000)
Supplemental				\$2,636,000
2009	\$1,056,797,000	\$1,255,420,000	\$1,275,281,000	\$1,246,864,000
Rescission				\$0
2010 1/	\$1,182,777,000	\$1,168,704,000	\$1,182,777,000	\$1,177,300,000
Rescission				\$0
2011 1/	\$1,220,478,000		\$1,268,580,000	\$1,177,300,000
Rescission				(\$10,337,400)
	φ1 <b>20</b> 0 41 <b>2</b> 200	φ1 100 /1 <b>2</b> 000	φ1 4 <b>3</b> 0 0 σ4 222	
2012 1/	\$1,298,412,000	\$1,198,412,000	\$1,439,064,000	\$1,461,880,000
Rescission				(\$2,762,953)
2012 1/	\$1,429,161,000			
2013 1/	\$1,429,101,000			

<sup>1/</sup> Includes funds for the Common Fund.

#### **Justification of Budget Request**

#### Office of the Director

Authorizing Legislation: Section 301 and title IV of the Public Health Service Act, as

amended.

Budget Authority (BA):

			FY 2013	
	FY 2011	FY 2012	President's	FY 2013 +/
	Actual	Enacted	<b>Budget Request</b>	- FY 2012
BA	\$1,454,323,000	\$1,457,381,000	\$1,429,161,000	-\$28,220
FTE	697	697	690	-7

<sup>&</sup>quot;Program funds are allocated as follows: Competitive Grants/Cooperative Agreements; Contracts; Direct Federal/Intramural and Other."

#### **Director's Overview**

The Office of the Director (OD) provides scientific and administrative leadership and guidance to foster trans-NIH activities that support the NIH mission. The OD coordinates NIH's extramural and intramural research activities; science policy, and related social, ethical, and legal issues; technology transfer; health information dissemination and education; policies governing the use of information technology; legislative activities; and oversight of the agency's stewardship of public funds. The OD manages, prioritizes, and allocates funds for NIH's budget and financial management, human resources, information technology, procurement services, property management, ethics, and administration of equal employment and diversity management practices. The OD Offices and examples of their initiatives are provided below.

The Office of Extramural Research (OER) provides overarching leadership, oversight, and the electronic system to review, administer, and manage NIH extramural research, training and career development programs. In FY 2011, extramural investments accounted for approximately 83 percent of NIH's budget, and provided funds to over 300,000 investigators at over 2,500 institutions worldwide. OER serves as the interface between NIH and the extramural research community and guides institutions and investigators through the NIH processes for application, review, and funding. OER ensures that NIH extramural policies are developed and administered effectively, transparently, and ethically and works in close partnership with the NIH Institutes and Centers to be accountable for the substantial investment in extramural research.

The Office of Intramural Research (OIR) provides leadership in the development and coordination of NIH's intramural research program's policies, training programs, and technology transfer. OIR pursues (1) rigorous scientific research review, (2) research integrity training, (3) sharing of resources, and (4) collaborations across NIH to enable scientists to conduct innovative biomedical research to prevent, treat, and reduce the burden of human disease. The Office of Technology Transfer (OTT) manages collaborations among intramural scientists and colleagues from academia and industry. In FY 2011, OTT executed approximately 195 licenses;

administered \$97 million in royalties; filed 500 patent applications worldwide; added 389 issued-patents worldwide to NIH's intellectual property portfolio; and coordinated 83 new Cooperative Research and Development Agreements. Currently, there are 37 Clinical Phase I to Phase III licensed technologies in the product development pipeline.

The Division of Program Coordination, Planning, and Strategic Initiatives (DPCPSI) fulfills requirements of the NIH Reform Act of 2006 by bringing under one administrative home many aspects of trans-NIH program planning and implementation as well as other cross-cutting NIH-wide functions. DPCPSI's mandate includes identifying and reporting on research that represents important areas of emerging scientific opportunities, rising public health challenges, or knowledge gaps that deserve special emphasis and would benefit from conducting or supporting additional research that involves collaboration between two or more Institutes and Centers, or would benefit from strategic coordination and planning. The Division also serves as a resource for portfolio analysis and coordinates program evaluation and performance management activities across the NIH. DPCPSI is composed of six programs offices: the Office of Strategic Coordination, the Office of AIDS Research, the Office of Research on Women's Health, the Office of Behavioral and Social Sciences Research, the Office of Disease Prevention, and the Office of Research Infrastructure Programs. The activities of these offices are described in the Program and Accomplishments section.

The Office of Science Policy (OSP) helps advance biomedical research through sound and comprehensive science policy development on high priority and cross-cutting issues of significance to the agency and the biomedical research community including, but not limited to, basic and clinical research involving recombinant DNA, biosafety and biosecurity, clinical and translational research, genomic technologies and genomic data sharing, and research partnerships and collaborations. OSP focuses on the intersection of science and society and attends to the scientific, clinical, ethical, and societal implications of research advances. OSP prepares analyses and reports for the public and in fulfillment of certain Congressional reporting requirements. OSP also manages the Scientific Management Review Board (SMRB) which was established under the authority of the NIH Reform Act of 2006 to conduct comprehensive organizational reviews of the NIH and to provide expert advice to the NIH Director on organizational and management matters.

The NIH's Office of Communications and Public Liaison (OCPL), is the communications headquarters for NIH and its 27 Institutes and Centers (ICs). OCPL leads strategic communications planning for NIH; responds to thousands of media requests every year; manages the NIH home page; coordinates communications among Institutes and Centers and with HHS; assists with NIH Director communications; manages the NIH Freedom of Information Act activities; provides tours for visitors; organizes special events; and provides science-based health information via print, TV, radio, and web-based formats. OCPL reaches out daily to the general public, scientific community, medical profession, and public and patient advocacy groups.

In 2011, OCPL handled more than 4,102 press calls and finalized and distributed over 300 news releases used by hundreds of media outlets throughout the world. Health professionals, scientists, and the public accessed NIH websites more than two billion times last year (daily visitors to the

site are 5.2M with 16M page views a day). OCPL has increased its social media presence, including Facebook, Twitter, and YouTube. NIH now provides portal for more than 181 social media sites. OCPL also manages the NIH Director's Council of Public Representatives (COPR) that provides NIH leadership with public input and perspectives on NIH programs and activities.

The Office of Legislative Policy and Analysis (OLPA) is the principal Congressional liaison for the NIH Director and Deputy Director, senior staff of the Office of the Director, and the NIH's 27 Institutes and Centers (ICs). OLPA provides timely and accurate legislative analysis, insight, and guidance to the Director in support of NIH's mission and the legislative implementation of the Director's vision for the NIH. OLPA prepares the NIH Director, Deputy Directors, and other senior NIH staff, and the Institute and Center directors for congressional hearings, briefings, and other substantive meetings by monitoring and analyzing pending legislation. OLPA facilitates the strong relationship between NIH and Congress by briefing members of Congress and their staffs on NIH priorities and programs, and coordinating congressional interactions with NIH. During the first year of the 112<sup>th</sup> Congress, OLPA led preparations for more than 11 congressional hearings, 51 member or staff briefings, and 59 member or staff visits and events at the NIH.

The Office of the Chief Information Officer (OCIO) provides trans-NIH leadership and management support for Information Technology (IT) activities, including IT strategic planning; information security; IT policy; capital planning and investment control; enterprise architecture; accessibility; and project and portfolio management. OCIO seeks to develop IT strategies that will promote efficiency and leverage economies of scale for NIH's IT needs.

The Office of Management (OM) advises the NIH Director and Deputy Director on all phases of NIH-wide administration and management; ensures compliance with legislative and external policy mandates; provides direction for strategic planning to meet administrative goals; and oversees the enterprise system for all NIH business transactions. The OM provides leadership and oversight for diverse areas such as budget and finance; human resources; management assessment, policy, and program integrity; contracts, procurement, and logistics; engineering services and facility management; security operations (police and fire); and a wide range of support services such as lab and radiation safety, ID cards, events management, the NIH library, medical illustration, and others.

Funds are included in R&D contracts to support trans-NIH initiatives, such as the Basic Behavioral and Social Sciences Opportunity Network (OppNet).

This Overview provided highlights of OD's role in shaping the agency's research agenda. For more information on OD program initiatives and accomplishments, please visit the OD's web page at <a href="http://www.nih.gov/icd/od/index.htm">http://www.nih.gov/icd/od/index.htm</a>.

#### **Program Description and Accomplishments**

Division of Program Coordination, Planning, and Strategy Initiatives (DPCPSI): DPCPSI was created by the NIH Reform Act of 2006 and provides leadership for identifying, reporting, and funding of trans-NIH research that represents important areas of emerging scientific opportunities, rising public health challenges, or knowledge gaps that merit further research and would benefit from collaboration between two or more NIH Institutes and Centers (ICs), or from strategic coordination and planning. The Division coordinates and oversees the planning, implementation, and evaluation of a series of trans-NIH programs that are supported by the NIH Common Fund. These catalytic programs help support research throughout the biomedical community by providing enabling technologies, services and programs; developing essential tools and methodologies; and fostering innovation through high risk/high reward programs. The Division includes major programmatic offices that coordinate research and activities related to AIDS, behavioral and social sciences, women's health, disease prevention, and dietary supplements.

DPCPSI is responsible for developing new approaches to analyzing the NIH research portfolio and the development and use of informatics tools for this purpose. The Division also manages NIH-wide evaluation and performance assessment activities, including coordination and preparation of plans and reports required by the Government Performance and Results Act. Another primary function of DPCPSI is to encourage and facilitate collaboration and help ensure coordination and planning of research between and among the NIH ICs.

In FY 2012, the mission of the Division expanded to include programs related to comparative medicine, shared and high-end instrumentation, and extramural research facilities improvement. Likewise, the Office of Science Education, previously housed within the Office of Science Policy, was postioned within DPCPSI to better coordinate important cross-cutting science education programs. Planned activities in FY 2013 are summarized below.

<u>Budget Policy</u>: The FY 2013 President's Budget request for DPCPSI is \$8.116 million, the same as the FY 2012 Enacted level. In FY 2013, DPCPSI will continue to coordinate a wide range of trans-NIH research opportunities, and the Division will be the home to new research infrastructure support programs transferred from the former National Center for Research Resources (NCRR). In addition, the Division will implement enhancements to its portfolio analysis efforts and coordinate and collaborate on related activities with other Federal agencies and the private sector.

Common Fund/Office of Strategic Coordination (OSC): The Common Fund supports programs that catalyze research throughout the biomedical community by providing enabling technologies, services and programs, developing essential tools and methodologies, and fostering innovation through high risk/high reward programs. These programs are described in detail in the Common Fund portion of this document.

The <u>OSC</u> oversees the management of the Common Fund, working with trans-NIH teams for each of the 24 Common Fund Programs. These teams ensure that each program meets the criteria of Common Fund programs to synergize with IC funded research. OSC provides input

to these groups to reflect guidance from the NIH and DPCPSI Directors and to maintain goal-driven management practices. As the Common Fund approaches its 10<sup>th</sup> year of support in FY 2013, program evaluation will be emphasized in OSC's activities. These evaluations are expected to deliver lessons learned concerning trans-NIH program management in addition to information concerning the scientific products and utility of the programs to date. Communication and outreach is also an increasing focus, as the products and data from the mature programs become ready for dissemination to the community at large.

<u>Budget Policy</u>: The FY 2013 President's Budget request for the Common Fund is \$544.930 million, the same as the FY 2012 Enacted level. Strategic planning for FY 2013 programs began in May 2011 with a brainstorming session with leading external panel members. Ideas discussed at and following that meeting will be pursued during FY 2012 as possible new program areas for the Common Fund in FY 2013. For additional details, see the Common Fund section.

Office of AIDS Research (OAR): The NIH OAR functions as an "institute without walls" to plan, coordinate, evaluate, and budget the trans-NIH AIDS research program, which is carriedout in every IC. The OAR has established unique and comprehensive trans-NIH planning, portfolio analysis, and budgeting processes to enhance collaboration across ICs, minimize duplication of effort, and ensure that AIDS research dollars support research in the highest priority areas of scientific opportunity that will lead to new tools to fight the global AIDS pandemic. This budget request is informed by the FY 2013 Trans-NIH Plan for HIV-Related Research. The process established by OAR to develop the annual strategic plan, involving both government and non-government experts, results in the identification of clear, overarching AIDS-research priorities and specific research objectives and strategies. These priorities are aligned with the goals of the President's National AIDS Strategy as well as the NIH Director's themes. In addition to allocating funds to the ICs for their NIH AIDS research and training activities, OAR identifies specific funding for emerging scientific opportunities and public health challenges that require focused attention; manages and facilitates multi-Institute and trans-Institute activities to address those needs; fosters research by designating funds and supplements to jump-start or pilot program areas; and sponsors scientific agenda-setting workshops to identify new cutting-edge initiatives. The Trans-NIH AIDS Research Budget, developed by OAR, appears in the Overview section of this document.

<u>Budget Policy</u>: The FY 2013 President's Budget request for OAR is \$63.802 million, the same as the FY 2012 Enacted level. In FY 2013, OAR will place priority on initiatives that support key priorities of the FY 2013 Trans-NIH Plan for HIV-Related Research. These priorities include: (1) *expand basic discovery research*, including the use of genomics and other high throughput technologies in the study of host genetics and other factors that affect HIV transmission and disease progression as well as basic science and therapeutic research to eliminate viral reservoirs that could lead to a cure; (2) *enhance prevention science*, including vaccines, microbicides, and treatment as prevention strategies; (3) *improve disease outcomes*, including studies of HIV-related coinfections, comorbidities, and other complications, such as issues related to aging, that have become more prevalent in HIV-infected individuals; (4) *reduce HIV-related disparities* to address the AIDS epidemic in the United States, particularly among racial and ethnic

populations, including initiatives among Hispanic populations and an initiative with the District of Columbia; and (5) translate research from bench to bedside to the community, including initiatives to facilitate the implementation of proven HIV prevention strategies and treatment regimens into the community; and research, infrastructure development, and training initiatives in international settings to better address the global AIDS pandemic. OAR will convene panels of government and non-government experts, including community representatives, to provide advice and identify priorities in areas of emerging scientific opportunity. OAR supports the administration of HHS panels to develop and update federal state-of-the-art treatment and prevention guidelines and their dissemination and current clinical trial information through AIDS*info*, a web-based service that provides essential information for caregivers and patients (available at www.aidsinfo.nih.gov). Other initiatives to enhance dissemination of research findings to the scientific community, healthcare providers, and communities at risk will also be supported. OAR will continue to support training programs to support AIDS researchers at NIH and around the world. The justification for OAR's distribution of all NIH AIDS research dollars to the Institutes and Centers can be found in the Overview of this document. In this FY 2013 trans-NIH AIDS research allocation to the ICs, OAR will increase funds to support critical prevention research in follow-up of recent results of NIH-funded clinical studies, support new and innovative basic science, the foundation for all of the AIDS research portfolio, and ensure funding for the restructured NIH clinical trials networks. In order to provide these resources, OAR will shift funds from other scientific areas.

Office of Research on Women's Health (ORWH): The NIH ORWH was established in 1990 to ensure the inclusion of women in clinical research, to advance and expand women's health and sex differences research, and to promote advancement for women in biomedical careers. ORWH is the NIH focal point for women's health research and works in partnership with the NIH ICs to ensure that women's health and sex differences research are incorporated into the broad NIH scientific framework. Through a series of regional scientific meetings, attended by the extramural scientific and professional communities, ORWH undertook a strategic planning process including both public hearings and topical discussions to determine priorities for the coming decade. The resulting report, Moving into the Future with New Dimensions and Strategies: A Vision for 2020 for Women's Health Research, provides recommendations for advancing women's health research, and incorporating technical and methodological advances into the research agenda. The strategic plan places priority on the translation of research outcomes into innovative methodologies for prevention, diagnostics and therapeutics, and on the use of new technologies and communication tools to improve women's health research and consequently affect overall public health. The ORWH inter-disciplinary research and career development programs have made great strides in increasing the number of early stage investigators studying women's health, magnifying sex differences research initiatives through collaborative efforts, and expanding the knowledge base for women's health.

<u>Budget Policy</u>: The FY 2013 President's Budget request for ORWH is \$ 42.324 million, the same as the FY 2012 Enacted level. ORWH, in partnership with NIH Institutes and Centers, will coordinate the implementation of the new NIH strategic plan, *Moving into the Future with new Dimensions and Strategies: A Vision for 2020 for Women's Health Research* through: 1) A research grant program to encourage investigators to apply emerging technologies to sex differences research. Through the use of high throughput technologies, a trans NIH initiative in

which sex differences are studied across diverse scientific fields at basic laboratory levels, including emerging technologies in sequencing, data acquisition, bioengineering, and bioinformatics, as well as modeling and computational analyses would facilitate the definition of sex differences at the molecular and systems levels; 2) Interdisciplinary translation of basic science into improved health care. New grantees receiving the ORWH sponsored Specialized Centers of Research (SCOR) on Sex Differences award will conduct studies ranging from basic research to translation into clinical practice. These studies will focus on developing sex-and gender-appropriate prevention, diagnostics, and therapeutics that are accessible, accurate and personalized for patients. By accelerating the application of research results to the clinical care of diverse populations, these centers are designed to maximize the public health benefit; 3) Maximize the domestic and global impact of women's health research. Through collaborative alliances, ORWH will begin the development of strategic domestic and global initiatives in women's health research to address issues such as the effect of environmental factors on women's health in the context of the lifespan, reproduction and aging in the global community; and; 4) Models for sustained advancement in science careers. Through its career development programs such as the Building Interdisciplinary Research Careers in Women's Health (BIRCWH) program, ORWH will implement interdisciplinary research career development opportunities to address the organizational, institutional, and systemic factors that impede the careers of women and men scientists across career stages.

## Program Portrait: Accelerating Personalized Prevention, Diagnostics, and Therapeutics through Interdisciplinary Sex Differences Research (APP DAT)

FY 2012 Level: \$0.0 million FY 2013 Level: \$5.0 million Difference: +\$5.0 million

The Office of Research on Women's Health, working in collaboration with the NIH Institutes and Centers, is implementing its new strategic plan with a new trans-NIH program announcement, Accelerating Personalized Prevention, Diagnostics And Therapeutics through Interdisciplinary Sex Differences Research (APP DAT). The main goal of this initiative is to catalyze the enrichment of the research continuum by incorporating a sex differences perspective. This approach can address questions that overlap the mission of any single IC and take into account health differences among populations. Using the NIH strategic plan for women's health as a scientific framework, this initiative seeks to increase sex differences research in basic science studies; to incorporate findings of sex/gender differences in the design and application of new technologies, medical devices, and therapeutics; and to create strategic alliances and partnerships maximizing the domestic and global impact of this research to actualize personalized prevention, diagnostics, and treatment for girls and women of diverse populations. Importantly, this initiative will leverage current scientific advances and study data by encouraging facilitating the reimagining of research using a perspective that includes the consideration of the effect of sex/gender on the outcome or question under study. Such an approach builds upon recent scientific advances and opportunities that have demonstrated the importance of sex differences in a host of diseases and conditions that are prevalent in women and which also affect men. Through the lens of women's health and sex differences. The trans-NIH focus will encourage the development of information systems needed for collecting, sharing, and comparing clinical data for diseases and conditions of women and girls. The expected results of this initiative will be the expansion of meritorious research projects which would advance the understanding of women's health and promote the study of sex and gender differences to improve health outcomes.

Office of Behavioral and Social Sciences Research (OBSSR): OBSSR furthers the mission of NIH by emphasizing the critical role that behavioral and social factors play in health, health care and well-being. OBSSR leads the coordination and development of policies, goals, and objectives related to strengthening research in the behavioral and social sciences at NIH.

OBSSR is also a liaison between NIH and the extramural research communities, other federal agencies, academic and scientific societies, national voluntary health agencies, the media, and the general public on matters pertaining to behavioral and social sciences research. OBSSR's vision is to bring together the biomedical, behavioral and social science communities to work more collaboratively to solve the pressing health challenges facing our nation. OBSSR's plan includes facilitating: (a) the next generation of basic behavioral and social sciences research; (b) trans-disciplinary "team science" that integrates biomedical, behavioral and social-ecological perspectives; (c) research that looks at how individual, group, and societal factors interact; and (d) the translation, implementation, dissemination and maintenance of best practices and proven strategies that reduce the burden of chronic disease and eliminate inequities in health and healthcare.

<u>Budget Policy</u>: The FY 2013 President's Budget request for OBSSR is \$27.001 million, the same as the FY 2012 Enacted level. In FY 2013, the Office will support the NIH Basic Behavioral and Social Science Opportunity Network (OppNet), a trans-NIH initiative to expand the agency's support for basic behavioral and social sciences research. Total NIH-wide support for OppNet in FY 2013 is \$20.000 million, equivalent to FY 2012.

## **OppNet Funding**

(Dollars in Thousands)

IC	FY 2011	FY 2012	FY 2013
NCI	\$1,716	\$3,456	\$3,451
NHLBI	1,042	2,098	2,095
NIDCR	139	280	278
NIDDK	608	1,224	1,220
NINDS	550	1,108	1,106
NIAID	1,621	3,060	3,061
NIGMS	690	1,656	1,620
NICHD	447	900	899
NEI	238	479	472
NIEHS	232	467	466
NIA	373	752	751
NIAMS	181	365	365
NIDCD	141	284	284
NIMH	501	1,009	1,007
NIDA	356	718	718
NIAAA	156	313	311
NINR	49	99	98
NHGRI	174	349	348
NIBIB	106	231	229
NIMHD	71	188	190
NCRR	427	0	0
NCCAM	43	87	87
NCATS	0	392	435
FIC	24	47	48
NLM	114	230	254
$OD^2$	0	207	207
TOTAL <sup>1</sup>	\$10,000	\$20,000	\$20,000

<sup>&</sup>lt;sup>1</sup> Type 1 Diabetes and B&F are excluded.

 $<sup>^2\,\</sup>mathrm{ORIP}$  & SEPA components of OD are included reflecting the NCATS reorganization in FY 2012.

Basic behavioral and social sciences research studies mechanisms and processes that influence behavior at the individual, group, community and population levels (see <a href="http://obssr.od.nih.gov/about\_obssr/BSSR\_CC/BSSR\_definition/definition.aspx#bfr">http://obssr.od.nih.gov/about\_obssr/BSSR\_CC/BSSR\_definition/definition.aspx#bfr</a> for a complete definition). Findings from basic behavioral and social sciences research lead to new approaches for reducing risky behaviors and improving the adoption of healthy practices. In addition, OBSSR will support two new initiatives in FY 2013. The first, Shared Medical

Decision Making, focuses on the development and use of tools to optimize joint medical decision making by patients and health care providers. The second will support behavioral interventions to address multiple chronic health conditions in primary care. In addition, the Office will continue to fund multi-year programs, including research to reduce or eliminate health disparities; a program to enhance the behavioral and social sciences content of medical school curricula; research to develop and translate basic behavioral and social science research into effective health behavior interventions; research on social networks and health; research on medication adherence; and application of systems science methodologies to the behavioral and social sciences and health. OBSSR will also continue to support research that applies systems approaches to health disparities through the Network on Inequality, Complexity, and Health. Finally, the Office will offer annual summer training institutes on the following topics: Systems science methodology and health; randomized clinical trials involving behavioral interventions; dissemination and implementation research in health; mobile health; and research methods in the behavioral and social sciences.

#### Program Portrait: Shared Decision Making in Clinical Practice

FY 2012 Level: \$0.0 million FY 2013 Level: \$3.0 million Difference: +\$3.0 million

The *Shared Medical Decision Making* initiative will support research on methods to optimize shared medical decision-making by healthcare providers and patients. Determining the optimal medical treatment for individual patients can be a complex process. While some decisions, e.g., treatment of acute appendicitis, are relatively straightforward, there can be considerable uncertainty about the appropriateness of many treatment choices, given a particular patient's needs and preferences. Whether to undergo back surgery for a spinal condition, whether to be screened for prostate cancer, and whether to treat breast cancer with a lumpectomy are examples of interventions that will not be appropriate for all patients. In cases such as these where the medical literature does not clearly identify a dominant treatment alternative and treatment choice, there must be a careful weighing of the risks and benefits of alternative treatments as well as consideration of patient preferences and degree of support from family or community resources. At the same time, patients are seeking—and many are demanding—a much greater role in treatment selection. Even though many are demanding "no decision about me, without me," clinical consent processes rarely elicit patient preferences. Moreover, evidence suggests that patients are usually not told about the full range of clinical options, their risks, and benefits.

Shared decision making in clinical care has been widely advocated as an effective means for reaching agreement on the best strategy for treatment. Through this process, a healthcare provider and a patient consider personalized information about the options, outcomes, probabilities, and scientific uncertainties of available treatment options as well as an assessment of how the patient assigns value to the treatment's risks and expected outcomes. Patient decision-support interventions and shared-decision aids help patients contribute to the decision-making process by providing information on options. Some of these tools elicit patient values and preferences and help communicate the utility associated with different treatment options, and they have been shown through research studies to result in better patient experience, more adherence to treatment regimens, lower cost, and better health outcomes.

While these early research results are promising, the study of patient-decision aids is in its infancy, and these aids are available for relatively few medical conditions. There are only a few examples of implementation of shared decision-making in clinical practice. In the usual clinical practice, most providers do not have the time to engage in detailed deliberation nor do they have the training or tools to assess patient preferences. Alternative delivery models that compliment rather than interfere with the usual care should be evaluated. In FY 2013, OBSSR will partner with NIH Institutes and Centers to launch the *Shared Medical Decision Making* initiative to support research on the effects of shared decision-making on healthcare costs, patient satisfaction, and patient outcomes as well as the feasibility of implementing shared decision-making in clinical practice. This program contributes to the NIH Director's Theme 3: Advancing Translational Science. The shared decision-making paradigm helps assure that patients receive the best evidence-based treatment.

Office of Disease Prevention (ODP): The mission of ODP is to foster, coordinate, and assess research in disease prevention and health promotion as a means to improve public health. ODP collaborates with other federal agencies, academic institutions, the private sector, non-governmental organizations and international organizations in the formulation of research initiatives and policies that promote public health. To carry out these diverse responsibilities, the Office of Dietary Supplements is included as an administrative unit within ODP and promotes scientific research in this area. ODP leads the NIH Prevention Research Coordinating Committee (PRCC) which serves as a venue for exchanging information related to recent scientific advances in disease prevention; examining the impact of new policies on research; planning new or discussing on-going initiatives; and high-lighting program accomplishments. As a Trans-NIH, trans-agency committee, the PRCC provides a broad perspective on the current state-of-the-science and actively disseminates information about prevention-related activities sponsored by federal and non-federal organizations to the NIH ICs.

In FY 2011, a new PRCC subcommittee was formed to examine the challenges in prevention science such as approaches in research methodology. ODP also serves as the focal point for evidence-based assessments of medical practice and state-of-the-science on behalf of the medical community and the public. It convenes independent, objective panels in a consensus development process to weigh the scientific evidence available to address specific challenges in clinical practice. Recommendations from this process are disseminated broadly to practitioners, policymakers, patients, the media, and the general public. In December 2011, a state-of-the-science conference was convened addressing the role of active surveillance in managing localized prostate cancer. Other recent topics have included vaginal birth after cesarean, lactose intolerance and health, and enhancing the use and quality of colorectal cancer screening.

Budget Policy: The FY 2013 President's Budget request for ODP is \$6.065 million, the same as the FY 2012 Enacted level. In FY 2013, ODP plans to continue to stimulate disease prevention research across the NIH and to coordinate and collaborate on related activities with other federal agencies as well as the private sector. The ODP does not have research grant authority or funds, but will continue its accomplishments through the PRCC and participating in other disease prevention and health promotion activities associated with the US Preventive Services Task Force, the Community Preventive Services Task Force, Healthy People 2020, and the National Prevention Strategy. Additionally, ODP will partner with NIH ICs and other agencies to develop consensus in areas of importance to patients, health care providers, and researchers. In FY 2013, the ODP will support a Consensus Development Conference on Gestational Diabetes Mellitus to better understand the benefits and risks of various screening and diagnostic approaches.

Office of Dietary Supplements (ODS): The mission of ODS is to strengthen knowledge and understanding of dietary supplements by evaluating scientific information, stimulating and supporting research, disseminating research results, and educating the public to foster an enhanced quality of life and health for the U.S. population. Toward this end, ODS co-funds research grants with NIH ICs on dietary supplements, ranging from in vitro laboratory and animal experiments to human studies and clinical trials; and sponsors systematic reviews in relevant areas as well as projects to enhance the incorporation of these reviews into nutrition research, working with the Agency for Healthcare Research and Quality and its Evidence-based Practice Center program. Through its Communications program, ODS makes accurate and upto-date scientific information about dietary supplements available to researchers, healthcare providers, and the public. ODS also works to create opportunities for dietary supplement and nutrition-related research training and career development for young investigators.

Budget Policy: The FY 2013 President's Budget request for ODS is \$27.717 million, the same as the FY 2012 Enacted level. Efforts for the current period will be guided by the ODS strategic plan. In addition to co-funding research grants on dietary supplements, major activities that this budget will support the Analytical Methods and Reference Materials program in the development, validation, and dissemination of analytical methods and reference materials that are critical tools for quality assurance of dietary supplements. ODS will continue to lead efforts to advance knowledge of vitamin D's importance to health and to accurately measure levels of this nutrient in both the U.S. population and in foods through its Vitamin D Initiative. ODS sponsors conferences and workshops on vitamin D and leads an active federal working group to identify research needs and how to meet them. In November 2010, as part of its Vitamin D Initiative, ODS established the Vitamin D Standardization Program (VDSP). Through this program, ODS is leading a collaborative effort with the Centers for Disease Control and Prevention and the National Institute for Standards and Technology (NIST) to standardize the measurement of vitamin D status in national health surveys worldwide (see Program of a Portrait: The Vitamin D Standardization Program). Additionally, ODS will support the continued development of the database of dietary supplement labels.

#### Program Portrait: The Vitamin D Standardization Program (VDSP)

FY 2012 Level: \$0.272 million FY 2013 Level: \$0.232 million Difference: -\$0.040 million

As part of its Vitamin D Initiative, the NIH Office of Dietary Supplements (ODS) established the Vitamin D Standardization Program (VDSP) in November 2010. ODS is leading a collaborative effort with the Centers for Disease Control and Prevention (CDC) and the National Institute for Standards and Technology (NIST) to standardize the laboratory measurement of vitamin D status in national health surveys worldwide. Standardization is essential to improve the detection, evaluation, and treatment of vitamin D deficiency and insufficiency by making measurements of serum total 25-hydroxyvitamin D [25(OH)D] accurate and comparable over time, location, and laboratory procedure.

Since the inception of this program, ODS has enlisted the participation of national health surveys from Australia, Canada, Germany, Ireland, Mexico, South Korea, the United Kingdom, and the United States. Two international planning meetings took place in 2011 resulting in the creation of the CDC Vitamin D Standardization Coordinating Center. Completion of the first round of vitamin D standardization for all eight national surveys and the participating assay manufacturers will take place in 2012. Another international planning meeting is scheduled for March 2012.

Objectives of the VDSP over the next 2 to 3 years are to:

- Standardize the measurement of serum total 25(OH)D in national health surveys by linking them to the NIST reference measurement procedure;
- Study similarities and differences in total 25(OH)D among national health surveys;
- Expand standardization services from national surveys to include assay manufacturers and clinical and research laboratories; and,
- Enable the use of standardized data in public health activities and patient care.

Office of Research Infrastructure Programs (ORIP): ORIP provides support for research and a variety of research infrastructure needs, including animal models and facilities; research models, biological materials, and human biospecimens; training and career development for veterinarians engaged in research; the acquisition of state-of-the-art and shared instrumentation; research resources grants to expand, re-model, renovate, or alter existing research facilities or to construct new research facilities; and coordinates science education activities at the NIH. ORIP is composed of the Division of Comparative Medicine; the Division of Instruments, Infrastructure Resources, and Construction; and the Office of Science Education.

#### **Division of Comparative Medicine (DCM)**

This Division provides scientists with essential resources, including specialized disease-model laboratory animals, research facilities, training, and other tool, that enable health-related discoveries. Animal models are a critical part of the biomedical research continuum to bridge the gap between basic and clinical science. Because many diseases need to be studied in living organisms, researchers have developed animal models, which mimic human conditions. In fact, virtually every major medical advance of the last century resulted from research involving animal models.

#### National Primate Research Centers (NPRCs)

The major goal of the NPRC program is to facilitate the use of non-human primates (NHPs) as models of human health and disease for basic, translational, and clinical biomedical research. It provides animals for research, facilities, and expertise in all aspects of NHP biology and husbandry through funding to eight institutions. It is neither cost effective nor feasible to reproduce these specialized facilities and expertise at every research institution, so the NPRCs are a valuable resource to the research community. Major areas of research benefiting from the resources of the NPRCs include AIDS, avian flu, Alzheimer's disease, Parkinson's disease, diabetes, asthma, and endometriosis. To facilitate these and other studies, the NPRC house 26,000 NHPs, 70 percent of which are rhesus monkeys, the most widely used NHP for HIV research and translational studies. In FY 2011, investigators at the NPRC continued to perform studies aimed at elucidating the mechanisms of immunodeficiency virus pathogenesis and to develop novel strategies for anti-HIV vaccines and microbicides. These studies are facilitated by a comprehensive set of primate models, assays, genetic tests, reagents and expertise developed by the NPRCs, as well as the NPRC facilities to perform all experiments on site. A current topic of intense investigation is the comparison of the response to HIV-type viral infection of "nonadapted" hosts, such as the rhesus macaque, with that of "natural" hosts, such as the sooty mangabey. Infection of non-adapted hosts, including HIV-infected humans, is the result of a

zoonosis that manifests in high virus levels and chronic generalized immune activation, leading to AIDS. Natural hosts with chronic infections, in wild or captive populations, also develop high virus levels, but do not exhibit immune activation and do not progress to AIDS. Understanding the cellular mechanisms involved in the difference in immune activation between non-adapted and natural hosts may lead to new approaches to AIDS-related therapies. This is just one example of the many AIDS-related investigations occurring at the NPRCs.

#### Comparative Medicine - General

DPCPSI funds research to create, develop, characterize, preserve, and study a broad array of high-quality animal models and biological materials, such as cell cultures. This funding also supports research to safeguard the health and welfare of laboratory animals and provides career development opportunities in specialized areas of translational/biomedical science. By utilizing non-mammalian models, such as fish, worms, and fruit flies, investigators are able to advance the understanding of gene function, protein interactions, and metabolic processes related to human health and disease. The mouse model and other genetically-altered animals provide opportunities for the discovery of molecular targets and biomarkers for pre-clinical testing and the development of therapies for genetic disorders. Further, continued enhancement of activities related to cryopreservation of animal germplasm and related technologies remains a major goal of the Division's efforts. Increasing the number of qualified research veterinarians and ensuring that veterinarians are recognized partners on translational research teams remains a priority for FY 2012 and FY 2013.

DPCPSI will continue to sponsor career development programs that attract and train graduate veterinarians in such specialties as primate clinical medicine, laboratory animal medicine, and rodent pathology to ensure that veterinarians are recognized partners on translational research teams. In addition, DPCPSI will sponsor career development programs for senior research veterinarians designed to enhance current skills or development of new biomedical research skills.

Through interactions with its NIH partners and scientific community, DPCPSI plans to maintain scientific priorities that best meet the broad needs of the multidisciplinary biomedical research community. To facilitate research supporting translation of laboratory discoveries into clinical applications, DPCPSI has developed and continues to populate an electronic directory of existing animal models for disease. The current emphasis is to link, through gene networks, relevant model features to appropriate human conditions.

#### Program Portrait: Application of animal stem cells in regenerative medicine

FY 2012 Level: \$12.2 million FY 2013 Level: \$12.2 million Difference: \$0.0 million

Regenerative Medicine or the process of creating living tissues to repair or replace damaged or missing organ functions has the potential to solve the problem of organ donation shortage and repair of congenital defects. The recent discovery of the process of reprogrammming adult cells addresses a major prolem in regenerative Medicine, immune rejection of the transplanted tissue, but will also facilitate advances in personalized medicine. Thus, the future application of stem cells technology is increasingly dependent on investigation of

stem cell propeties and their behavior in animal models. Such studies in animal stem cells are providing information regarding mechanisms of action, biodistribution, potential therapeutic efficiency, and safety of the new developed technologies. DPCPSI supports the development of stem cells and animals for different fields of regenerative medicine that range from basic research investigations to complex infrastructure resources that provide facilities and expertise. Specific current programs include:

- The Adult Mescenchymal Stem Cell Resource prepares, quality tests, and distributes human, rat, and mouse bone marrow stromal cells (alsso known as mesenchymal stem cells) to multiple ivestigators at numerous research sites.
- The Rodent Resource Centers archive and distribute embryonic stem cells lines for biomedical researchers. These collections include wild type as well as genetically modified embryonic stem cells, which can be used for developing animals or for investigations in regenerative medicine.
- The National Primate Research Centers conduct about 40 research projects dealing with different aspects of stem cell biology and application in regenerative medicine. These projects are devoted to the development of procedures and protools for isolation, expansion, chacterization and massive propagation of stem cells as well as establishment of the best non-human primate models using both embryonic and adult stem cells.

A workshop planned for 2012 will create a forum for expert discussion on the current status of and future requirements for the use of animal models for cell-based regenerative medicine. Further development of animal models for regenerative medicine will offer new treatments for a broad number of diseases, which cannot be addressed through other therapies.

#### Division of Instruments, Infrastructure Resources, and Construction

This Division supports programs to expand the Nation's capacity for the conduct of biomedical research; grants for the acquisition of state-of-the-art instrumentation and integrated instrument systems; human tissue and organ research resources to meet the needs of biomedical researchers; and grants to expand, re-model, renovate, or alter existing research facilities or to construct new research facilities, including laboratory animal facilities.

#### Shared Instrumentation (SIG) and High-End Instrumentation (HEI) Grant Programs

These unique, competitive programs provide new generation technologies to NIH-supported investigators which increase the quality of their funded programs and accelerate a broad array of basic, translational, and clinical research. The SIG Program funds equipment in the \$100-\$600 thousand range; the HEI Program funds instrumentation in the \$750 thousand-\$2 million range. The programs are cost effective since the instruments are shared by an average of 8-10 NIH-fundedusers. The specialized instruments, with the latest technological capabilities, are key tools in advancing biomedical research since they allow studies that could not be carried-out previously and open-up new research opportunities.

#### Extramural Research Facilities Improvement Program

DPCPSI provides support to institutions for alterations and renovations to improve laboratory animal facilities; to assist institutions in complying with the regulations and policies related to care and use of laboratory animals; and to purchase equipment for animal resources, diagnostic laboratories, transgenic animal resources and similar activities. Additionally, DPCPSI monitors,

for either a 10- or 20-year period, grants previously made to modernize and construct research facilities that support basic and/or clinical research.

<u>Budget Policy</u>: The FY 2013 President's Budget request for ORIP is \$283.698 million, the same as the FY 2012 Enacted level. The National Primate Research Center's highest funding priority will be to maintain support for the breadth of its activities. The NCATS and NPRCs will continue to work together to determine specific ways in which consortium-based activities can be leveraged to maximize the value of funding. Topics covered by specific working groups include colony management, training, genetics and genome banking. Another activity of the NPRCs is working with the CTSA consortium to help clinical researchers increase their knowledge of and access to animal models, such as nonhuman primates.

The Comparative Medicine – General program will continue funding for KOMP2 (Knock Out Phenotyping Program) Repository and the Ruth L. Kirschstein National Research Service Awards (NRSA), where DPCPSI/ORIP plans to support approximately 139 full-time training positions. Through interactions with its NIH partners and scientific community, DPCPSI/ORIP's Division of Comparative Medicine plans to maintain scientific priorities that best meet the broad needs of the multidisciplinary biomedical research community. To facilitate research supporting translation of laboratory discoveries into clinical applications, DPCPSI/ORIP has developed and continues to populate an electronic directory of existing animal model for disease. The current emphasis is to link, through gene networks, relevant model features to appropriate human conditions. DPCPSI/ORIP will continue to sponsor career development programs that attract and train graduate veterinarians in such specialties as primate clinical medicine, laboratory animal medicine, and rodent pathology to ensure that veterinarians are recognized partners on translational research teams.

#### Office of Science Education (OSE)

OSE develops programs, instructional materials, and career resources that serve our Nation's science teachers, their students (kindergarten through college [K-16]), and the public. These activities are conducted through strategic partnerships with NIH ICs as well as external organizations. OSE also advises NIH leadership on education policy issues, coordinates related activities with NIH extramural and intramural offices, and represents NIH in Federal science, technology, engineering and mathematics (STEM) education initiatives. OSE supports the NIH Director's Theme of "New Investigators and New Ideas" by working to foster a pool of talented students well-prepared in mathematics and science that can then choose to pursue medical science, health, and other challenging careers. To better inform the development of future OSE programs and career development programs, OSE is interacting with researchers engaged in studying why students select and persevere in scientific and medical careers. Engaging scientists in K-16 education – through resource and program development – is the Office's newest focus. LifeWorks E-Mentors program matches students with scientists for one-on-one career guidance. The LifeWorks website and SciLife Programs encourage students to explore health and medical careers and learn how to achieve their career goals. The NIH Curriculum Supplements are lesson plans and web-based activities on current health science topics that help students develop the workforce skills they need to succeed in the 21st century. In response to teacher requests, since FY 2000, OSE distributed more than 400,000 supplements to a diverse national audience, and

OSE continueds to make a special effort to reach-out to underrepresented populations. OSE will continue to work with the White House Office of Science and Technology Policy through the NSTC, and help to implement the NSTC Committee on STEM Education's first Five-Year Federal Strategic Plan for STEM Education (FSPSE). OSE will work with all NIH STEM education programs to help them embrace the goals of the new FSPSE. This coordinating function takes places through quarterly, or more frequent, meetings of the trans-NIH Science Education Resources Group. OSE will continue work with NIGMS to design and implement a web-based high school curriculum supplement based on NIGMS' previously-developed computer model simulations of the global spread of infectious diseases.

Budget Policy: The FY 2013 President's Budget request for the Office of Science Education (OSE) is \$3.980 million, the same as the FY 2012 Enacted level. OSE is working to align the nineteen titles in its *NIH Curriculum Supplements Series* with the Common Core State Standards in English Language Arts and Mathematics adopted by all but four states. OSE will also align its educational materials to the draft Common Core State Standards in science that are expected in late 2012. OSE will continue to work with the White House Office of Science and Technology Policy through the NSTC, and help to implement the NSTC Committee on STEM Education's first 5-year Federal Strategic Plan for STEM Education (FSPSE). OSE will work with all NIH STEM education programs to help them embrace the goals of the new FSPSE. This coordinating function takes places through quarterly, or more frequent, meetings of the trans-NIH Science Education Resources Group. OSE will continue work with the National Institute of General Medical Sciences to design and implement a web-based high school curriculum supplement based on NIGMS's previously developed computer model simulations of the global spread of emerging and re-emerging infectious diseases.

Science Education Partnership Awards (SEPA) Program: The goals of the SEPA Program are to: 1) increase the pipeline of future scientists and clinicians, especially from minority, underserved, and rural kindergarten to grade 12 (K-12) students; and, 2) to engage and educate the general public on the health-related advances made possible by NIH-funded research. By creating relationships among educators, museum curators, and medical researchers, SEPA encourages the development of hands-on, inquiry-based curricula that inform participants about such high interest issues as the prevention and treatment of obesity, stem cell research, and research on specific types of infectious diseases. In addition, SEPA provides professional development for teachers and mentoring opportunities for students. In FY 2011, 18 new SEPA projects and five trans-NIH Blueprint Neuroscience K-12 STEM projects were funded. The SEPA portfolio of 59 awards includes 48 K-12 STEM and 11 science museum projects. SEPA continues its emphasis on developing a diverse workforce pipeline for rural and under-served populations with 21 SEPA projects in 16 of the 23 Institutional Development Award (IDeA) states and Puerto Rico.

<u>Budget Policy</u>: The FY 2013 President's Budget request for the SEPA program is \$20.282 million, the same as the FY 2012 Enacted level. In November 2008, the NIH Council of Public Representatives—the formal mechanism at NIH for public input into the research decision-making and priority-setting process, recognized SEPA as <u>the</u> science education resource for K-12 and the general public. In FY 2013, ORIP will continue to develop outreach efforts to expand the benefits of the SEPA program to other NIH programs such as IDeA, RCMI, and CTSAs.

These efforts include informing high schools about opportunities to participate in SEPA, and encouraging science museums, which reach a wide audience, to educate the public in the benefits of NIH-supported research.

Intramural Loan Repayment and Scholarship Programs (ILRSP): The mission of the ILRSP is to develop and manage programs that offer financial incentives and other benefits to attract highly-qualified physicians, nurses, and scientists into careers in biomedical, behavioral, and clinical research as employees of the NIH. There are two education programs offered. The Intramural Loan Repayment Program (IRP) repays outstanding eligible educational debt for postgraduates, and in return, participants must enter into a contractual agreement to conduct qualified research as NIH employees. During FY 2011, the distribution of LRP awards was as follows: A total of four awards for the Clinical LRP – zero new and four renewals; a total of 75 awards for the General LRP – 34 new and 41 renewals; and a total of seven awards for the AIDS LRP -- one new and six renewals. The grand total of LRP awards for FY 2011 was 86. The NIH Undergraduate Scholarship Program (UGSP) offers competitive scholarships to exceptional college students from disadvantaged backgrounds that are committed to biomedical, behavioral, and social science health-related research careers at the NIH. For every year of UGSP scholarship support, recipients are obligated to participate in a ten-week summer internship and one year as a full-time paid employee in an NIH research laboratory. UGSP selected 13 new recipients for the UGSP Scholarship award and four UGSP Scholars received scholarship award renewals. In addition, 16 UGSP scholars conducted their yearlong service obligation and 10 completed their summer internship during this same period. Salaries for the UGSP scholars totaled \$965,000.

<u>Budget Policy</u>: The FY 2013 President's Budget request for ILRSP is \$7.393 million, the same as the FY 2012 Enacted level. The FY 2013 program plans include the UGSP summer interns and payback scholar salaries as well as the UGSP and Loan Repayment projected new and renewal awards. The awards are as follows:

(Dollars in Millions)

	FY 2010 #		FY 2011 #		FY 2012 #		FY 2013 #	
	Awards	Amount	Awards	Amount	Awards	Amount	Awards	Amount
NIH Clinical Loan								
Repayment Program	5	\$0.309	4	\$0.064	7	\$0.293	7	\$0.293
NIH General Loan								
Repayment Program	72	\$4.409	75	\$4.512	95	\$5.500	106	\$6.3
AIDS Loan Repayment								
Program	7	\$0.285	7	\$0.234	7	\$0.329	7	\$0.329
Undergraduate								
Scholarship	1.5	00.165	1.7	ФО 222	15	<b>40.255</b>	1.5	Φ0.200
Program	15	\$0.165	17	\$0.232	17	\$0.255	15	\$0.300

**Director's Discretionary Fund (DDF):** The DDF allows the NIH Director to respond quickly to new and emerging high-priority research opportunities and health priorities. In FY 2011, funds were used to support trans-NIH initiatives such as the Institute of Medicine Chimpanzee Study,

National Alzheimer's Project Act, Improving Data on International Collaborations and the Human Frontier Science Program.

<u>Budget Policy</u>: The FY 2013 President's Budget request for DDF is \$9.981 million, the same as the FY 2012 Enacted level. In FY 2013, the DDF will continue funding projects to help uncover new knowledge that prevents, detects, diagnoses, and treats disease and disability, from the common cold to the treating of genetic disorders.

Nuclear/Radiological/Chemical Countermeasures: The Radiation and Nuclear Countermeasures Program develops medical countermeasures that can be used to mitigate and treat injuries caused by nuclear and radiological exposures. The program supports collaborative efforts with academic and commercial organizations as well as eligible agencies of the Federal government, such as the Armed Forces Radiobiology Research Institute (AFRRI) and NIH components, including the National Institute of Allergy and Infectious Diseases, the lead NIH Institute for this program, National Cancer Institute, National Institute on Aging, and National Institute for Diabetes and Digestive and Kidney Diseases. On-going initiatives include the Centers for Medical Countermeasures against Radiation (CMCRs), which conduct basic, translational, and applied research leading to new medical countermeasures against radiological and nuclear exposures due to terrorist attacks; and research and development of medical countermeasures for gastrointestinal acute radiation syndrome (ARS), radiation-induced thrombocytopenia, pulmonary radiation injury, cutaneous radiation injury, and combined radiation injuries. The NIH supports product development support services; the development of oral drugs to remove internal, radionuclide contamination from the body; and the study of immune senescence with the Radiation Effects Research Foundation in Hiroshima, Japan. Program accomplishments since initiation (FY 2005) include over 450 scientific articles published in peer-reviewed journals, over 40 patents, and over 120 candidate-medical countermeasures in discovery and development phases. The product development support services effort includes interaction with over 130 pharmaceutical and biotechnology companies, development of animal models for screening and pivotal efficacy studies, identification of potential medical countermeasures for hematological ARS (12) and gastrointestinal ARS (7), identification of lead candidates for radionuclide decorporation (5), and confirmation of efficacy of a candidate medical countermeasure in an animal model of ARS. A targeted SBIR program for Radiological/Nuclear Medical Countermeasure Product Development was established in FY 2009. Fourteen SBIR grants have been funded since FY 2009 including two SBIR grants that transitioned from Phase I to Phase II.

The Chemical Countermeasures Research Program is designed to prevent, diagnose, and treat the conditions caused by potential and existing chemical agents of terrorism and chemicals that may be released from transportation and storage facilities by industrial accidents or during a natural disaster. The program includes collaborative efforts with for-profit and non-profit organizations, as well as eligible agencies of the Federal Government such as the U.S. Army Medical Research Institute of Chemical Defense and seven participating NIH Institutes. A comprehensive science network has been established which includes research Centers of Excellence, individual research grants and projects, SBIR grants, contracts and inter-agency agreements. The Program conducts basic, translational, and clinical research aimed at the discovery and/or identification of better therapeutic and diagnostic medical countermeasures

against chemical threat agents. The overarching goal of the chemical program is to enhance our medical response capabilities during an emergency. The program is entering a fifth year of funding. Accomplishments include over 250 scientific published peer-review journals, over 300 posters/abstracts, 10 patents, interactions with more than seven pharmaceutical and biotechnology companies, and over 10 candidate-medical countermeasures in discovery and research phases including Midazolam, which is in an on-going Phase 2/3 clinical trial.

Budget Policy: The FY 2013 President's Budget request for Countermeasures against Radiological/Nuclear Threats and Chemical Countermeasures Research is \$95.298 million, the same as the FY 2012 Enacted level. The program plans for FY 2012, along with expected accomplishments, are as follows: The Radiation and Nuclear Countermeasures Program will support basic and applied research to develop new products for measuring radiation exposure, protecting against exposure and minimizing and treating the effects of exposure to external radiation sources and internal contamination of radionuclides. Examples of specific activities include research to continue the development of medical countermeasures to reduce the hematopoietic and gastrointestinal toxicity of acute radiation and to enhance the excretion of radionuclides from persons with internal radiological contamination. In addition, NIH will expand research to identify and characterize biomarkers that are predictive of organ and tissue damage due to acute radiation exposure. The CMCRs will continue to provide training and educational materials in radiobiology to enhance the level of scientific expertise and attract new investigators to the program. The Chemical Countermeasures Research program, will be directed at promising drugs and antidotes for nerve agents, poisons such as cyanide, toxic industrial chemicals capable of causing pulmonary edema, and vesicating (blistering) agents, such as mustard gas which blisters the skin and mucous membranes on contact. NIH will continue clinical safety and efficacy trials for specific products including Midazolam, an anticonvulsant drug currently in advanced development. Elements of the research effort include basic research addressing critical gaps in knowledge important to product development, evaluation of mechanisms of injury and host response, along with the enhancement of the repair process, and the evaluation and development of promising countermeasures.

Foundation for the National Institutes of Health (FNIH): The FNIH is a 501(c)(3) public charity established by Congress as the sole entity to support the NIH mission by forming public-private partnerships for biomedical research, education and training. FNIH raises funds for, and establishes partnerships, to advance biomedical initiatives that can benefit from financial and scientific collaboration between the public and private sectors. In FY 2011, FNIH received cash and in-kind donations of over \$37 million. Partnerships benefiting the NIH include major scientific endeavors such as the Biomarkers Consortium; the Alzheimer's disease Neuroimaging Initiative; the Observational Medical Outcomes Partnership; and an extensive global health portfolio in vaccine development, malnutrition and enteric disease research and HIV research. In December 2011, the Foundation, in collaboration with the NIH, hosted the third Mobile mHealth Summit with over 3,000 participants. This is a major annual event focusing on mobile technology's growing potential to improve health and health research. For the past 14 years, the Foundation has raised funds for the Clinical Research Training Program, training over 200 fellows at the NIH Clinical Center. By the end of calendar year 2011, FNIH raised, since inception, over \$585 million for public-partnerships.

<u>Budget Policy</u>: The FY 2013 President's Budget request for the Foundation for NIH is \$0.493 million, the same as the FY 2012 Enacted level. Funding will continue to support direct salary and overhead costs incurred by the FNIH in its efforts to explore and develop public private partnerships for the benefit of NIH. The Foundation for NIH will continue serving both the public and private sectors in areas of mutual interest in order to advance the mission of the NIH.

**OD Operations:** OD Operations is comprised of several OD offices that provide advice to the NIH Director, policy direction and oversight to the NIH research community, and administer centralized support services essential to the NIH mission. These include the Offices of Extramural Research, Intramural Research, Science Policy, Management, Communications and Public Liaison, Legislative Policy and Analysis, Equal Opportunity and Diversity Management, Chief Information Officer, Executive Office, Executive Secretariat, NIH Ethics Office, and the Immediate Office of the Director.

Budget Policy: The FY 2013 President's Budget request for OD Operations is \$123.081 million, a \$0.122 million or 0.10 percent decrease from the FY 2012 Enacted level. In FY 2013, OD Operations will continue grants compliance oversight activities and continuing educational efforts to improve and enhance compliance requirements. Support also will continue in the area of human subject's research initiatives to accommodate required NIH-wide policy development, educational activities, oversight and coordination of the NIH Human Research Protection Program. OD Operations will continue to enhance its risk management program operations and expand compliance and training activities within the NIH Privacy Program. Funds also will support the restoration and replacement of the OD's IT hosting and networking infrastructure to prevent the potential of increasing network outages both in frequency and duration that could adversely impact OD-wide staff productivity.

The OD will continue to support high priority bioethics research and training projects across the NIH Institutes and Centers (ICs). These funds are part of a broader initiative, which is managed by the Office of Science Policy, aimed at integrating bioethics across the spectrum of the NIH research portfolio. In FY 2011, the OD bioethics funds were used to support or supplement 36 extramural grants and three intramural projects across 12 ICs covering a wide range of topics, including training in the responsible conduct of research and bioethics research related to health disparities, bioengineering, decision making in the context of pediatric advanced care and adult chronic illness, ethical issues raised for caregivers of dementia patients in their roles as surrogate decision makers, and ethical considerations pertinent to the disclosure of incidental findings derived from sequencing research. Bioethics research and training are necessary to ensure appropriate conduct of research, to inform policy analysis and development, and to maintain and enhance public trust and confidence as we explore new frontiers in science and translate new technologies and research findings into clinical practice and public health.

OD Operations will also continue to fund the NIH Director's Challenge Fund established in FY 2008 for \$1.500 million. The Office of Intramural Research will use these funds to foster innovation, accelerate intramural science, and encourage trans-NIH collaboration. Initial funding support to the ICs is limited to two years for a pilot project, renewable for up to two more years with additional required support from the host IC depending on progress and competing new applications. Some funds may be set aside for one-time only use (i.e.,

instrumentation). Subsequently, the host ICs would be expected to fully support projects. Specific criteria for a successful project remain to be determined, but priority will be given to novel, high-risk approaches that include interdisciplinary and trans-NIH components.

The National Children's Study (NCS): The National Children's Study (NCS) is a longitudinal birth cohort observational study with the overall goal to improve the health and well-being of children and to identify antecedents of healthy adulthood by examining the effects of a broad range of environmental influences and biological factors. The NCS will produce an unprecedented amount of pertinent information and provide a foundation to analyze factors that contribute to growth, development, health, and disease to guide science and policy.

In developing plans to implement this study, early architects of the NCS decided to aim for a sampling strategy that would deliver a national sample of children from birth through age 21 years. Thus, the sample frame for the NCS Vanguard and Main Study was initially based on a national probability sample using geography as the basis. The initial sampling plan was to select approximately 100 of the about 3000 counties in the United States as the Primary Sampling Units and smaller geographic segments within the Primary Sampling Units as Secondary Sampling Units. The initial recruitment plan was to have field workers go door to door to contact women living in a Secondary Sampling Unit who were either pregnant or between 18 and 49 and might become pregnant.

The Vanguard Study launched in January 2009 and, by summer 2009, field experience suggested that the household contact recruitment protocol in use would not allow the NCS to meet a target of 100,000 newborns in a reasonable time or at a reasonable cost. Thus, in 2010 the NCS began a substudy designed to compare alternative protocols for recruiting a population-based sample. In mid 2011, the NCS Program Office developed and discussed with the NCS Advisory Committee and the NIH leadership assessing a sampling frame based on provider location instead of participant residence. By late 2011, the NCS had sufficient data to evaluate the recruitment strategies examined in the 2010 substudy. Preliminary analyses suggested that a provider-based recruitment strategy could be the most efficient, but with efficiency limited due to the segmented Secondary Sampling Units. Specifically, at a particular provider location, many women had to be screened to identify the relatively few who resided in a designated geographic segment.

In assessing alternative sampling strategies, NCS and NIH leadership considered the overall scientific goals and which of these could be achieved with different strategies. Additional considerations were costs, based on Vanguard data, and the reality of flat or shrinking budgets for biomedical research. As a consequence, NIH now proposes that the Main Study sampling frame be based on provider location. One approach for developing such a sampling frame would be to use providers associated with specific health plans. Such an approach would have several advantages in terms of cost and feasibility, but would abandon the geographic based probability sample. Consequently, the enrolled population would no longer be a national probability sample but, instead, a well described cohort followed longitudinally.

The specific consequence of the change in the sampling frame includes reduced precision in describing prevalence rates and generalizing some of the relationships observed. However, NCS

would still enroll a nationally varied sample. The loss of a probability sample will most affect the statistical generalizability of some relationships among psychosocial and economic parameters and outcomes. However, the capacity to study biological relationships and pathways will remain robust from a scientific standpoint, even if not statistically generalizable.

#### Next steps include:

- 1. Work with NCS contractors, survey statisticians from the National Center for Health Statistics, biostatisticians from the National Institutes of Health, and additional statisticians from other Federal agencies and the private sector to develop further this proposed approach, evaluate alternatives parameters for the sampling strategy, and articulate the implications of the approach with respect to the generalizability of different types of findings.
- 2. Conduct a feasibility study of the proposed provider-based sampling approach, and develop protocols for this approach.
- 3. Working with the NCS Advisory Committee to understand the implications for the design of the Main Study of the pilot study results and the statistical evaluations described here.

NCS Leadership is committed to a data driven, evidence based, and community and participant informed model for decision making. The NCS Program Office intends to announce funding opportunities in FY 2012 for continuation of the Vanguard Study (for award in FY 2012) and for the Main Study (for award in FY 2013).

Budget Policy: The FY 2013 President's Budget request for NCS is \$165.000 million, a \$28.098 million or 14.55 percent decrease from the FY 2012 Enacted level. NIH is evaluating alternative sampling approaches that will reduce costs by building on existing infrastructure, and streamling administrative components. In FY 2013, the NCS Vanguard Study will continue and the NCS Main Study will begin. As the pilot for the Main Study, the Vanguard Study will continue to anticipate each phase of the Main Study, providing reliable field data to inform Main Study methods, operations, and costs. In FY 2013, the Vanguard Study will experience a reduced level of effort compared to its previous, resource intensive recruitment phase. It will test retention strategies and other procedures to help ensure that the Main Study includes a diverse selection of participants and to verify that the methods and measures used in the Main Study are feasible, acceptable to participants (critical for retention), and cost-effective. In FY 2013, implementation of Main Study activities will begin, with a protocol designed with components based on findings from the Vanguard Study. The NCS Main Study will also use FY 2013 funds to provide community outreach and communications, to support bio-specimen and environmental collections, and for administrative components including data coordination, an information management system, and study logistics.

## NATIONAL INSTITUTES OF HEALTH Office of the Director

#### **Budget Authority by Object**

(Dollars in Thousands)

		FY 2012 Enacted	FY 2013 PB	Increase or Decrease
Total co	ompensable workyears:			
	Full-time employment	697	690	(7)
	Full-time equivalent of overtime and holiday hours	4	4	0
	Average ES salary (in dollars)	\$177,133	\$178,019	\$886
	Average GM/GS grade	12.6	12.6	0.0
	Average GM/GS salary (in dollars)	\$103,480	\$103,997	\$517
	Average salary, grade established by act of			
	July 1, 1944 (42 U.S.C. 207) (in dollars)	\$117,535	\$119,886	\$2,351
	Average salary of ungraded positions (in dollars)	149,262	150,008	746
		FY 2012	FY 2013	Increase or
	OBJECT CLASSES	Enacted	PB	Decrease
	Personnel Compensation:	1		
11.1	Full-time permanent	\$61,101	\$62,546	\$1,445
11.3	Other than full-time permanent	8,772	8,979	207
11.5	Other personnel compensation	2,889	2,957	68
11.7	Military personnel	929	965	36
11.8	Special personnel services payments	554	564	10
	Total, Personnel Compensation	\$74,245	\$76,011	\$1,766
12.0	Personnel benefits	\$23,384	\$23,771	\$387
12.2	Military personnel benefits	306	312	6
13.0	Benefits for former personnel	0	0	0
	Subtotal, Pay Costs	\$97,935	\$100,094	\$2,159
21.0	Travel and transportation of persons	\$1,875	\$1,875	\$0
22.0	Transportation of things	146	146	0
23.1	Rental payments to GSA	0	0	0
23.2	Rental payments to others	62	62	0
23.3	Communications, utilities and			
	miscellaneous charges	1,626	1,626	0
24.0	Printing and reproduction	1,230	1,230	0
25.1	Consulting services	5,597	5,615	18
25.2	Other services	66,348	66,348	0
25.3	Purchase of goods and services from			
	government accounts	141,272	144,650	3,378
25.4	Operation and maintenance of facilities	183	183	0
25.5	Research and development contracts	216,810	185,799	(31,011)
25.6	Medical care	0	0	0
25.7	Operation and maintenance of equipment	1,097	1,097	0
25.8	Subsistence and support of persons	0	0	0
25.0	Subtotal, Other Contractual Services	\$431,307	\$403,692	(\$27,615)
26.0	Supplies and materials	\$1,285	\$1,285	\$0
31.0	Equipment	2,970	2,970	0
32.0	Land and structures	0	0	0
33.0	Investments and loans	0	0	0
41.0	Grants, subsidies and contributions	918,945	916,181	(2,764)
42.0	Insurance claims and indemnities	0	0	0
43.0	Interest and dividends	0	0	0
44.0	Refunds	0	0	(#20.2 <b>7</b> 0)
	Subtotal, Non-Pay Costs	\$1,359,446	\$1,329,067	(\$30,379)
	Total Budget Authority by Object	\$1,457,381	\$1,429,161	(\$28,220)

# NATIONAL INSTITUTES OF HEALTH Office of the Director

## **Salaries and Expenses**

(Dollars in Thousands)

	FY 2012	FY 2013	Increase or
OBJECT CLASSES	Enacted	PB	Decrease
Personnel Compensation:			
Full-time permanent (11.1)	\$61,101	\$62,546	\$1,445
Other than full-time permanent (11.3)	8,772	8,979	207
Other personnel compensation (11.5)	2,889	2,957	68
Military personnel (11.7)	929	965	36
Special personnel services payments (11.8)	554	564	10
Total Personnel Compensation (11.9)	\$74,245	\$76,011	\$1,766
Civilian personnel benefits (12.1)	\$23,384	\$23,771	\$387
Military personnel benefits (12.2)	306	312	6
Benefits to former personnel (13.0)	0	0	0
Subtotal, Pay Costs	\$97,935	\$100,094	\$2,159
Travel (21.0)	\$1,875	\$1,875	\$0
Transportation of things (22.0)	146	146	0
Rental payments to others (23.2)	62	62	0
Communications, utilities and			
miscellaneous charges (23.3)	1,626	1,626	0
Printing and reproduction (24.0)	1,230	1,230	0
Other Contractual Services:			
Advisory and assistance services (25.1)	5,597	5,615	18
Other services (25.2)	66,348	66,348	0
Purchases from government accounts (25.3)	89,023	88,823	(200)
Operation and maintenance of facilities (25.4)	183	183	0
Operation and maintenance of equipment (25.7)	1,097	1,097	0
Subsistence and support of persons (25.8)	0	0	0
Subtotal Other Contractual Services	\$162,248	\$162,066	(\$182)
Supplies and materials (26.0)	\$1,285	\$1,285	\$0
Subtotal, Non-Pay Costs	\$168,472	\$168,290	(\$182)
Total, Administrative Costs	\$266,407	\$268,384	\$1,977

## NATIONAL INSTITUTES OF HEALTH

#### Office of the Director

#### $Details \ of \ Full-Time \ Equivalent \ Employment \ (FTEs)$

	FY 2011 Actual		FY 2012 Enacted		FY 2013				
					PB				
OFFICE/DIVISION	Civilian	Military	Total	Civilian	Military	Total	Civilian	Military	Total
Office of the Director									
Direct:	644	5	649	644	5	649	637	5	642
Reimbursable:	48	0	48	48	0	48	48	0	48
Total:	692	5	697	692	5	697	685	5	690
Total	692	5	697	692	5	697	685	5	690
FTEs supported by funds from Cooperative Research and Development Agreements	0	0	0	0	0	0	0	0	0
FISCAL YEAR	Average GS Grade								
2009	12.6								
2010	12.7								
2011	12.6								
2012	12.6								
2013	12.6								

# NATIONAL INSTITUTES OF HEALTH Office of the Director

#### **Detail of Positions**

	FY 2011	FY 2012	FY 2013
GRADE	Actual	Enacted	PB
Total, ES Positions	14	14	14
Total, ES Salary	2,479,867	2,479,867	2,492,265
GM/GS-15	115	115	114
GM/GS-14	133	133	131
GM/GS-13	174	174	172
GS-12	104	104	103
GS-11	47	47	46
GS-10	5	5	5
GS-9	35	35	35
GS-8	12	12	12
GS-7	8	8	8
GS-6	4	4	4
GS-5	4	4	4
GS-4	5	5	5
GS-3	3	3	3
GS-2	1	1	1
GS-1	0	0	0
Subtotal	650	650	643
Grades established by Act of			
July 1, 1944 (42 U.S.C. 207):			
Assistant Surgeon General	0	0	0
Director Grade	5	5	5
Senior Grade	0	0	0
Full Grade	0	0	0
Senior Assistant Grade	0	0	0
Assistant Grade	0	0	0
Subtotal	5	5	5
Ungraded	63	63	63
Total permanent positions	621	621	614
Total positions, end of year	732	732	725
Total full-time equivalent (FTE)			
employment, end of year	697	697	690
Average ES salary	177,133	177,133	178,019
Average GM/GS grade	12.6	12.6	12.6
Average GM/GS salary	103,480	103,480	103,997